PASSAIC RIVER REMEDIAL INVESTIGATION PROGRESS REPORT #12

REPORTING PERIOD: October 11, 2003 through November 7, 2003 DATE: November 21, 2003

Contract Number: DACW41-02-D-0003

EPA IAG Numbers: DW96941915 and DW96941975

Task Orders: 0008/0011

MPI Project Numbers: 0285-924/4553-001

USEPA Remedial Project Manager:Alice Yeh212-637-4427MPI Project Manager:Bruce Fidler201-398-4365MPI Deputy Project Manager:Lisa Szegedi-Greco201-398-4328COE Contact:Beth Buckrucker816-983-3581

		Summary of C	ontract Actions		
Task Order	Contract	Date Signed	Cost	Fee	Total Cost
	Action				
0008	ATP 1	10/15/02	\$791,654	\$60,956	\$852,610
0008	ATP 2/WVN1	2/4/03	\$791,654	\$60,956	\$852,610
0008	ATP3/WNV2	9/19/03 -	\$791,654	\$60,956	\$852,610
		submitted			
0011	ATP 1	3/11/03	\$306,945	\$18,317	\$325,262
0011	ATP 2/WVN 1	9/10/03	\$306,250	\$19,012	\$325,262
0011	ATP 3/WVN 2	11/6/03	\$306,250	\$19,012	\$325,262
			Total Authorize	\$1,177,872	

Task Order 0008 ATP 3/WVN 2 reallocates dollars and hours among numerous tasks to accommodate a variety of task expenditure variances and minor scoping adjustments

Task Order 0011 ATP 3/WVN 2 reallocates dollars and hours from two website module tasks to project management and billing/clerical and data evaluation. The tasks that dollars were moved from will need to have money backfilled into them once the next award is made.

1. Progress Made This Reporting Period.

WAD 01

Malcolm Pirnie

During the reporting period, Malcolm Pirnie, Battelle, and HydroQual personnel participated in two conference calls with Passaic River Project Team Members from the United States Environmental Protection Agency (USEPA) Region 2 and the United States Army Corp of Engineers - Kansas City District (USACE - KC). These conference calls are scheduled for every other Tuesday at 9:30 EST.

On October 20, 2003, a Press Event was held at the Fire Training Facility in Newark to announce the kick-off of a regional partnership between the USACE, USEPA, NJDOT, and NJDEP to cleanup and restore the Lower Passaic River. Alice Yeh, USEPA and Bruce Fidler, Malcolm Pirnie, Inc., attended.

On October 22, 2003, the USEPA COI determination procedures for TAMS were finalized and TAMS personnel were given access to PREmis (WAD 01)

On October 24, 2003, the eleventh set of Earned Value (EV) curves and Progress Report covering the period from September 6, 2003 through October 7, 2003, as well as an invoice covering the same period, were submitted to the USACE and USEPA.

On October 24, 2003, a revised schedule (updated as of October 7, 2003) was posted to the digital library.

On October 30, 2003, additional negotiations on WADs 04-06 were held between Alice Yeh (USEPA), Beth Buckrucker (USACE – KC District), Trudy Shannon (USACE – NY District), Bruce Fidler (Malcolm Pirnie), and Lisa Szegedi-Greco (Malcolm Pirnie). The majority of these negotiations were focused on WAD 05. As indicated below, additional negotiations have subsequently been rescheduled for November 12, 2003. (WADs 04-06)

On November 3, 2003, Alice Yeh participated in a Governmental Partnership presentation to the Harbor Dredged Material Management Integration Work Group (DMMIWG). The slide show developed for the meeting is posted on the website under the Document Library (see Project Management, Meeting Presentations/Minutes).

Battelle and HydroQual

During the reporting period, Malcolm Pirnie, Battelle, and HydroQual personnel participated in various conference calls with Passaic River Project Team Members. See the Malcolm Pirnie section above.

WAD 02

Malcolm Pirnie

On October 13, 2003, PREmis Request No. 22 for the second round of modifications/enhancements to ourpassaic.org was submitted to USEPA and USACE; this information was uploaded to the request module on PREmis.

On October 17, 2003, work on the public website was completed in time for the Press Event held on October 20, 2003. This included look and feel, uploading the fact sheets, press releases, revised Q&As, mission statement, the registration module, the digital library, and GIS. (WADs 02 and 03)

On October 17, 2003 Malcolm and Battelle (see below) began work on the data quality scheme. This includes reviewing the existing historical data, mapping the existing

sampling locations, and beginning the data quality checklist. It is anticipated that a memo describing the scheme will be submitted to the USEPA and USACE by December 12, 2003.

On October 24, 2003, upload of the Diamond Alkali documents to the digital library was completed.

On October 27, 2003, RSCC was contacted and it was determined that the CLP laboratories used for this project will be required to submit their EDDs in compliance with MEDD requirements.

On November 3, 2003, Malcolm Pirnie received the First Search information on the NJDEP sites and began culling the list based on this information. Information reviewed includes distance from river, date of last action, and contaminants of concern.

HydroQual

HydroQual conducted the following work during the reporting period:

A conservative version of the CARP model was received and set up to simulate six chemicals including PCB77, PCB153, OCDD, TCDD, BAP and Pyrene. For the purpose of this modeling exercise a preliminary study area was defined including the Lower Passaic River, Lower Hackensack River, Newark Bay, Kill Van Kull and Arthur Kill. Loads from various sources were estimated including, sediment diffusive and particulate release, CSOs, storm water, municipal wastewater treatment plants and tributaries (Upper Passaic River and Upper Hackensack River). Point source loads were either obtained directly from the CARP team or calculated using CARP methodology. Specific tasks undertaken include:

Acquired the CARP model code. The source code for the CARP model was transferred to the work area of the Lower Passaic River team. The source code was compiled and a short (20-day) simulation was performed to ensure the proper execution of the model.

Acquired the CARP data (water column in Passaic and adjacent water bodies). Data compiled by the CARP team were transferred. Data processing programs were configured to display the data as needed for the Lower Passaic River study. Preliminary data analysis (e.g. concentration vs. flow rate) was performed.

Acquired Loading data. Model inputs for the CARP model including point sources (WWTPs, CSOs, storm drains), open boundary concentrations (Atlantic Ocean) and atmospheric loads were obtained. The parameters simulated by the CARP team are somewhat different from those simulated by the Passaic team. For PCBs, for example, the CARP team simulates homologues, whereas the Passaic team simulates individual congeners. Therefore, although the information received from the CARP team is useful it does not constitute all of the required inputs. Additional data gathering and analysis are required for the Passaic model.

Performed computer runs for sediment diffusion and particles resuspension sources for the PCB congener 153, PCB congener 77, TCDD, OCDD, pyrene, and BAP. For these simulations the steady-state, present conditions, mass flux of chemical (kg/day) was calculated based on sediment concentration data. For the porewater diffusion release this constituted calculating the porewater concentrations (truly dissolved and DOC sorbed) based on a portioning coefficient and calculating the mass flux based on a mass transfer coefficient. For the resuspension release a sediment resuspension velocity was calculated based on a net burial (sedimentation rate) and deposition rate.

Battelle

During the reporting period, Battelle has been working on an approach to the data quality scheme task.

WAD 03

Malcolm Pirnie

Throughout the reporting period, Malcolm Pirnie and HydroQual continue to contact potential technical advisory team members to determine their interest in serving on the project.

On October 16, 2003 a copy of the technical expert team conference call minutes were finalized and posted to the website.

On October 24, 2003, the Draft technical advisory team invitation letter and COI form were sent to USEPA and USACE for review.

2. Issues and Recommended Solutions (or Outstanding Issues).

• Technical

None

Schedule

None

Funding

Problem: WAD 02, WO 06, WE a-c, Preliminary Contaminant Mass Balance and In-Situ Mass Quantification - This task is currently projected to be completed over budget. The discrepancy between the percent completed and the expenditures in the mass balance summary is explained by the CARP team charging to this task for the data transfer (as previously agreed upon) and also by the initial spending on the report outline and drafting that is not at par with where HydroQual believes the report should be at this point.

Solution: HydroQual anticipates that charges for drafting its report will ultimately

match the approved budget. In order to address the additional charges to the project by the CARP team for data transfer, it will be necessary to transfer these charges to Subcontractor Technical Support (WAD 04, WE 3.2) under Task Order 0011 as agreed once the negotiated funding for this task is awarded.

Problem: WAD 02, WO 07, WE 01, Evaluate HEP/CARP Modeling Framework - This task is slightly over budget due to the two sequential reviews conducted by Malcolm Pirnie, one of them by a sediment modeling staff member new to the project.

Solution: Since this was the most critical of the reviews of modeling work in terms of how other team partners / agencies will understand the effort, reviews of other modeling products can be cut back to balance the expenditures.

Problem: WAD 03, WO 08, WE 01, Establish Technical Expert Team – This task appears to be over budget since time has been charged, but no earned value has been taken yet.

Solution: The budget variance will decrease once subcontracts are established since earned value cannot be taken until each subcontract is executed.

3. Anticipated/Planned Activities in Next 30 Days

Malcolm Pirnie

- November 10, 2003 Malcolm Pirnie will send USEPA and USACE a list of the sites for which information from the NJDEP will be required. (WAD 02)
- November 17, 2003 Malcolm Pirnie will submit the revised proposal for Task Order 0011, WADs 4 and 5 to the USACE.
- November 25, 2003 USACE will award approximately \$500,000 toward Task Order 11, WADs 4 and 5.
- November 28, 2003 Malcolm and Battelle will submit the data gap memo (based on the historical data currently available) to the project team. (WAD 02)
- November 28, 2003 Malcolm Pirnie will send an introduction letter and COI package to potential technical advisory team members. (WAD 03)
- November 28, 2003 USEPA and Malcolm Pirnie will receive a letter from RSCC granting formal permission for several requested modifications to the CLP program. (WAD 02)
- November 28, 2003 USEPA will supply Malcolm Pirnie with the list of Ventron/Velsicol documents that can be made public. Malcolm Pirnie will begin uploading these documents to the PREmis digital library. (WAD 02)
- December 12, 2003 Malcolm Pirnie and Battelle will submit the data quality scheme memo to the USEPA and USACE. (WAD 03)

HydroQual

• December 1, 2003 – The Mass Balance Modeling Summary will be submitted.

<u>Battelle</u>

- November 28, 2003 Together with Malcolm Pirnie, Battelle will submit the data gap memo (based on the historical data currently available) to the project team. (WAD 02)
- December 12, 2003 Together with Malcolm Pirnie, Battelle will submit the data quality scheme memo. (WAD 03)

4. Key Personnel Additions or Changes

None

5. Attachments

Summary of Task Order No. 0008, Page 1

Summary of WADs 1 and 2, Task Order 0008, Page 2

Summary of WAD 1 Task Order 0008 – Project Management Administration, Page 3

Summary of WAD 2 Task Order 0008 – RI/FS Services, Page 4

Summary of Task Order No. 0011, Page 1

Summary of WAD 3, Task Order 0011 – Additional RI/FS Services, Page 2

SUMMARY OF TASK ORDER NO. 0011 ADDITIONAL RI/FS SERVICES 10/11/03-11/07/03

Task Order No. 0011	Current Budget					Cost to Date		Earned Value			stimate to	Estimate at		
	Cost (BC)		Budget Cost (BCWS)		(ACWP)		Complete (PCT)	(BCWP)		(Complete (ETC)	Completion (EAC)		
WAD 03 (Project Management			-	(BC WS)			(101)				(ETC)		(EAC)	
Adminstration)	\$	306,249	\$	225,580	\$	160,046	53.45%	\$	163,697	\$	136,504	\$	296,550	
NA (Fee)	\$	19,012	\$	13,979	\$	9,909	53.45%		NA	\$	10,920	\$	23,386	
Total (Less Fee)	\$	306,249	\$	225,580	\$	160,046	53.45%	\$	163,697	\$	136,504	\$	296,550	

Task Order No. 0011	Cost Variance (CVAR)		Schedule Variance (SVAR)	Cost Performance Index (CPI)	Schedule Performance Index (SPI)	CPI/SPI Ratio	
WAD 03 (Project Management Adminstration)	\$	6,721	\$ (135,072)	1.02	0.73	1.41	
NA (Fee)		NA	NA	NA	NA	NA	
Total (Less Fee)	\$	6,721	\$ (135,072)	1.02	0.73	1.41	

Prepared 11/21/03

	MPI	Battelle	Total
Total Budget	\$187,514	\$137,748	\$325,262
Total Expended	\$105,921	\$64,028	\$169,949
Remaining Funds	\$81,593	\$73,720	\$155,313
Schedule Status	On Schedule	On Schedule	

Calculations:

 $PCT = (BCWP/BC) \times 100*$

ETC = (BAC-BCWP)/(BCWP/ACWP)**

CAC = ACWP + ETC

CVAR=ACWP-BCWP

SVAR=BCWS-BCWP

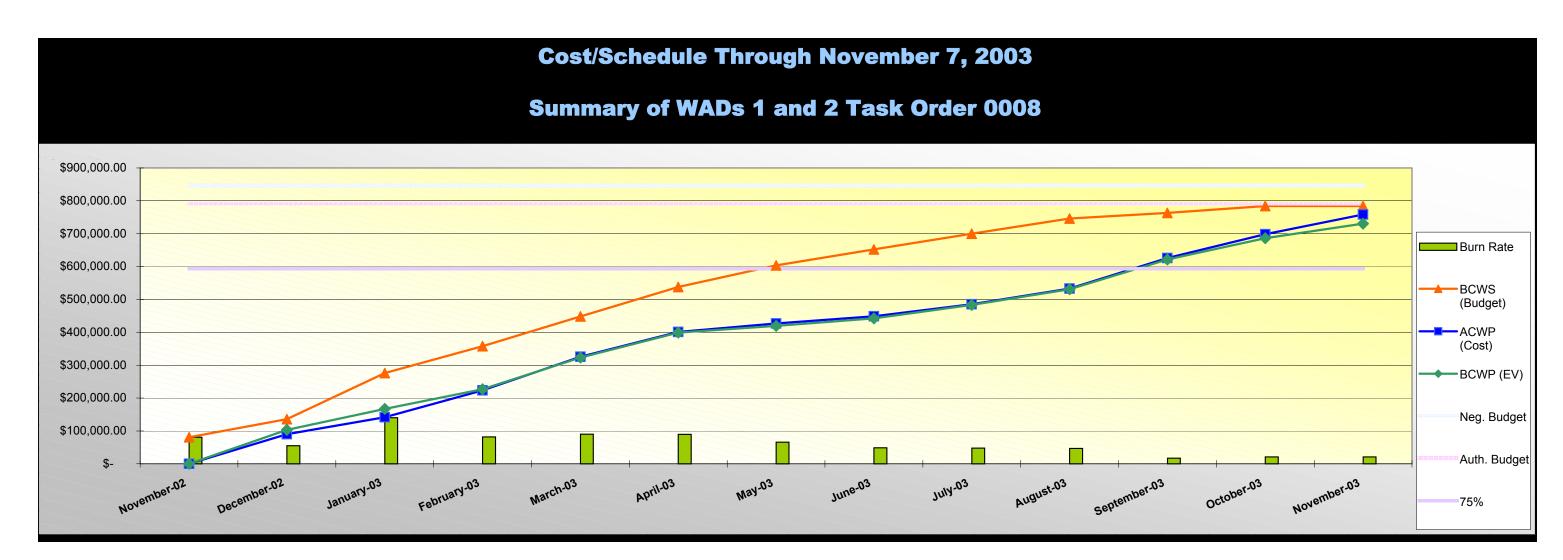
CPI = BCWP/ACWP

SPI = BCWP/BCWS

* - PCT for Fee is calculated less travel, since travel expense costs are not fee-bearing.

** - Generally, this formula is used to calculate ETC; however, wherever warranted a judgmental ETC is estimated.

Month	WAD03	Burn Rate - Total
Mar-03	\$ 38,223	\$ 38,223
Apr-03	\$ 55,019	\$ 55,019
May-03	\$ 45,855	\$ 45,855
Jun-03	\$ 40,281	\$ 40,281
Jul-03	\$ 48,837	\$ 48,837
Aug-03	\$ 32,260	\$ 32,260
Sep-03	\$ 24,610	\$ 24,610
Oct-03	\$ 21,860	\$ 21,860
Burn Rate - Total by WAD	\$ 306.945	306.945



Note: The earned value curves depict labor costs and expenses to date. The percent complete for the WAD is a statistical calculation.

Cost/Schedule Through November 7, 2003

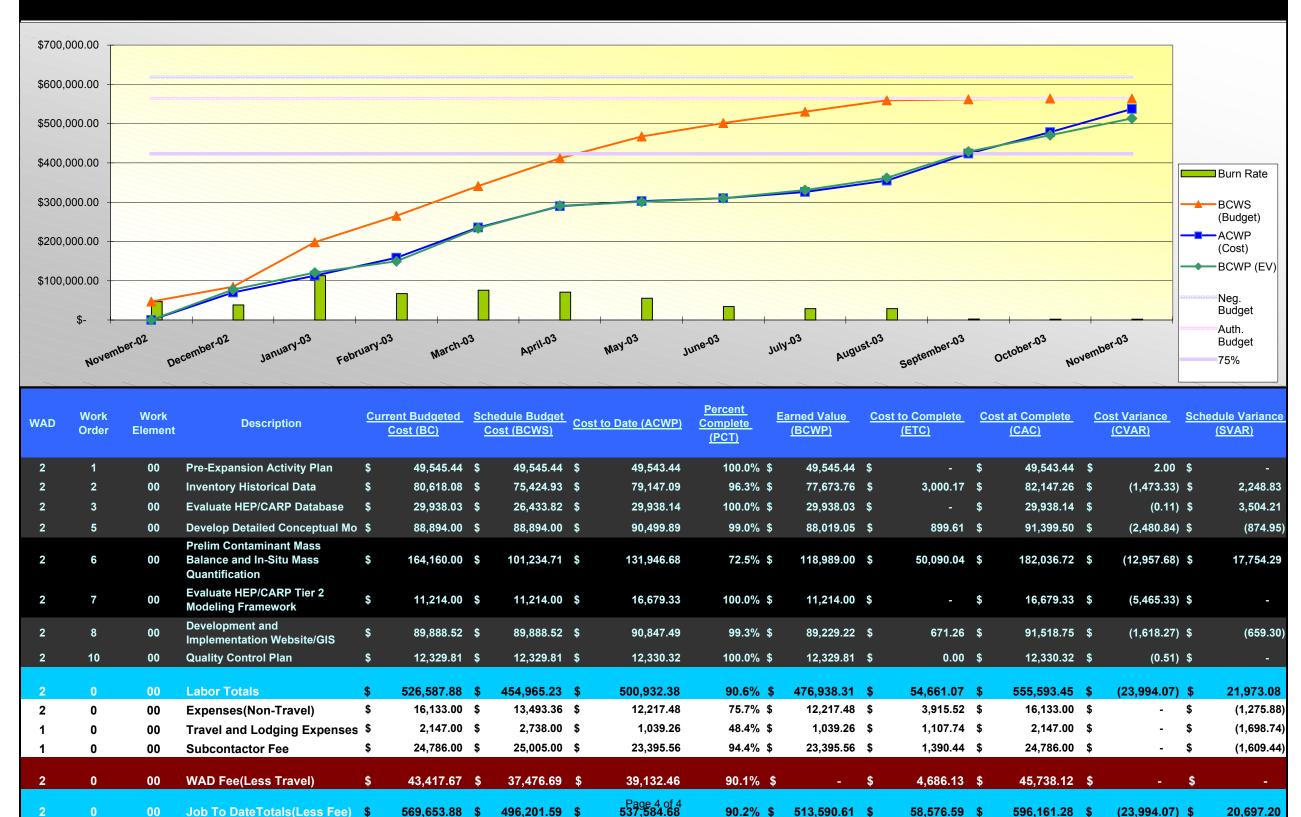
Summary of WAD 1 Task Order 0008 - Project Management Administration



WAD	Work Order	Work Element	Description	<u>Cı</u>	urrent Budgeted Cost (BC)	hedule Budget Cost (BCWS)	Co	st to Date (ACWP)	Percent Complete (PCT)	Earned Value (BCWP)	<u>C</u>	Cost to Complete (ETC)	<u>C</u>	ost at Complete (CAC)	<u>C</u>	ost Variance (CVAR)	<u>Sche</u>	edule Variance (SVAR)
1	1	00	Project Administration/Reporting	\$	140,939.25	\$ 138,313.34	\$	144,759.34	100.0% \$	140,939.25	\$		\$	144,759.34	\$	(3,820.09)	\$	2,625.91
1	2	00	Meetings	\$	23,495.00	\$ 23,496.00	\$	21,339.24	91.9% \$	21,593.00	\$	1,879.65	\$	23,218.89	\$	253.76	\$	(1,903.00)
1	3	00	Technical Support	\$	27,716.00	\$ 35,901.00	\$	25,455.85	91.8% \$	25,455.85	\$	2,260.15	\$	27,716.00	\$		\$	(10,445.15)
1	0	00	Labor Totals	\$	192,150.25	\$ 197,710.34	\$	191,554.43	97.8% \$	187,988.10	\$	4,139.80	\$	195,694.23	\$	(3,566.33)	\$	(9,722.24)
1	0	00	Expenses(Computer/Reproduction)	\$	24,972.00	\$ 25,056.00	\$	24,507.89	98.1% \$	24,507.89	\$	464.11	\$	24,972.00	\$	-	\$	(548.11)
1	0	00	Travel and Lodging Expenses	\$	3,000.00	\$ 300.00	\$	3,084.49	102.8% \$	3,084.49	\$	(84.49)	\$	3,000.00	\$	-	\$	2,784.49
1	0	00	Subcontactor Fee	\$	1,661.00	\$ 1,661.00	\$	1,598.01	96.2% \$	1,598.01	\$	62.99	\$	1,661.00	\$	-	\$	(62.99)
1	0	00	WAD Fee(Less Travel)	\$	17,369.78	\$ 17,821.31	\$	16,999.68	97.9%	-	\$	368.31	\$	17,653.30	\$		\$	1
1	0	00	Job To DateTotals(Less Fee)	\$	221,783.25	\$ 224,727.34	\$	220,744.82	97.9% \$	217,178.49	\$	4,603.91	\$	225,348.73	\$	(3,566.33)	\$	(10,270.35)

Note: The earned value curves depict labor costs and expenses to date. The percent complete for the WAD is a statistical calculation.

Cost/Schedule Through November 7, 2003 Summary of WAD 2 Task Order 0008 - RI/FS Services



90.2% \$ 513,590.61 \$

58,576.59 \$

596,161.28 \$

(23,994.07) \$

20,697.20

Note: The earned value curves depicts labor costs and expenses to date. The percent complete for the WAD is a statistical calculation.

496,201.59 \$

569,653.88 \$

Job To DateTotals(Less Fee) \$

SUMMARY OF TASK ORDER NO. 0008 MANAGEMENT, SUPPORT, AND INVESTIGATION 10/11/03-11/07/03

Task Order No. 0008	Current idget Cost (BC)	Bu	cheduled idget Cost (BCWS)	_	ost to Date (ACWP)	Percent Complete (PCT)	Earned Value BCWP)		Estimate to Complete (ETC)		Complete		stimate at ompletion (EAC)
WAD 01 (Project Management Adminstration)	\$ 221,783	\$	224,727	\$	220,745	97.9%	\$ 214,094	\$	4,604	\$	225,349		
WAD 02 (RI/FS Services)	\$ 569,654	\$	496,202	\$	537,585	90.2%	\$ 512,551	\$	58,577	\$	596,161		
NA (Fee)	\$ 60,787	\$	55,298	\$	56,132	92.4%	NA	\$	5,054	\$	63,391		
Total (Less Fee)	\$ 791,437	\$	720,929	\$	758,330	92.4%	\$ 726,645	\$	63,181	\$	821,510		

Task Order No. 0008	Cost Variance (CVAR)		Schedule Variance (SVAR)	Cost Performance Index (CPI)	Schedule Performance Index (SPI)	CPI/SPI Ratio
WAD 01 (Project Management Adminstration)	\$	(3,566)	\$ (10,270)	0.98	0.97	1.02
WAD 02 (RI/FS Services)	\$	(23,994)	\$ 20,697	0.96	1.04	0.92
NA (Fee)		NA	NA	NA	NA	NA
Total (Less Fee)	\$	(27,560)	\$ 10,427	0.96	1.01	0.95

Prepared 11/21/03

	MPI	HQI	Battelle	Total
Total Budget	\$553,244	\$275,935	\$23,432	\$852,611
Total Expended	\$543,776	\$250,196	\$18,057	\$812,029
Remaining Funds	\$9,468	\$25,739	\$5,375	\$40,582
		Work slightly		
Schedule Status	On Schedule	behind schedule	On Schedule	

Calculations: PCT = (BCWP/BC) X 100* ETC = (BC-BCWP)/(BCWP/ACWP)** CAC = ACWP + ETC

It should be noted that this calculation is conducted at a work element level, not a work order level

CVAR=ACWP-BCWP SVAR=BCWS-BCWP

SVAREBOUNDED WE COPI = BCWP/ACWP

SPI = BCWP/BCWS

* - PCT for Fee is calculated less travel, since travel expense costs are not fee-bearing.

** - Generally, this formula is used to calculate ETC; however, wherever warranted a judgmental ETC is estimated.

Month	Burn Rate - WAD01	Burn Rate - WAD02	E	Burn Rate - Total
Nov-02	\$ 34,181	\$ 46,654	\$	80,835
Dec-02	\$ 16,828	\$ 38,149	\$	54,977
Jan-03	\$ 27,265	\$ 113,045	\$	140,310
Feb-03	\$ 14,548	\$ 67,366	\$	81,915
Mar-03	\$ 14,548	\$ 75,705	\$	90,253
Apr-03	\$ 13,617	\$ 70,918	\$	84,535
May-03	\$ 22,616	\$ 55,405	\$	78,021
Jun-03	\$ 14,548	\$ 34,263	\$	48,812
Jul-03	\$ 18,570	\$ 28,976	\$	47,546
Aug-03	\$ 17,664	\$ 28,895	\$	46,559
Sep-03	\$ 14,548	\$ 2,400	\$	16,949
Oct-03	\$ 18,836	\$ 2,108	\$	20,945
Burn Rate - Total by WAD	\$ 227,770	563,885		791,655

Cost/Schedule Through November 7, 2003 Summary of WAD 3 Task Order 0011 - Additional RI/FS Services \$350,000.00 \$300,000.00 Burn Rate \$250,000.00 -BCWS \$200,000.00 (Budget) ----ACWP \$150,000.00 (Cost) ◆ BCWP (EV) \$100,000.00 Neg. Budget \$50,000.00 Auth. Budget October-03 April-03 August-03 July-03 March-03 May-03 June-03 75% <u>Percent</u> **Earned Value** Cost at Complete Work Current Budgeted Schedule Budget Cost to Complete **Cost Variance Schedule Variance** Work WAD Description Cost to Date (ACWP) Complete Order **Element** Cost (BC) Cost (BCWS) (BCWP) (ETC) (CAC) (CVAR) (SVAR) (PCT) Project Administration/Report \$ 30.363.00 \$ 26.497.61 84.3% \$ 25.599.94 \$ 2.139.90 \$ (6,544.98)3 00 18.170.83 \$ 4.930.08 \$ 31.427.69 \$ 3 2 00 Meetings 6,462.00 \$ 3,018.00 37.3% \$ 3,231.00 \$ 213.00 \$ (3,231.00)8,654.00 \$ 5,065.49 \$ 8,083.49 \$ **PEAP and Schedule** \$ 12,260.62 100.0% \$ 3 00 11,099.00 \$ 11,099.00 \$ 11,099.00 \$ - \$ 12,260.62 \$ (1,161.62) \$ 4 00 Populate & QC Database 60,888.00 \$ 41,245.00 \$ 36,277.40 63.93% \$ 36,311.70 \$ 24,553.09 \$ 60,830.49 \$ 34.30 \$ (24,888.29)3 4.1 00 **Develop Data Scheme** 16,673.00 \$ 4,033.00 \$ 5,204.70 63.93% \$ 5,204.70 \$ 11,468.30 \$ 16,673.00 \$ - \$ (11,468.30)3 4.2 Populate Analytical Database \$ 44,215.00 \$ 37,212.00 \$ 31,072.70 70.4% \$ 31,107.00 \$ 13,093.55 \$ 44,166.25 \$ 34.30 \$ (13,419.99)00 Integration with HEP/CARP \$ 79,013.34 \$ (73,023.02)5 00 156,567.00 \$ 114,934.11 \$ 63,921.17 50.5% \$ 62,740.30 \$ 126,661.47 \$ 15,092.17 \$ 3 Establish Technical Expert Te \$ (23,740.00)6 00 23,740.00 \$ 23,740.00 \$ 9,596.96 0.0% \$ #DIV/0! #DIV/0! \$ (9,596.96) \$ 284,400.03 \$ 00 **Labor Totals** 291,311.00 \$ 215,650.94 \$ 151,571.76 53.3% \$ 155,254.98 \$ 132,828.27 \$ 6,720.79 \$ (131,427.29)0 00 Expenses(Computer/Reprc \$ 7,929.00 \$ 5,265.32 \$ 4,253.70 53.65% \$ 4,253.70 \$ 3,675.30 \$ 7,929.00 \$ - \$ (3,644.30)Travel and Lodging Expens \$ - \$ 31.80 #DIV/0! \$ #DIV/0! #DIV/0! \$ (31.80) \$ 00 6,995.00 \$ 4,663.34 \$ 4,188.73 59.88% \$ 4,188.73 \$ 2,806.27 \$ 6,995.00 \$ 00 **Subcontactor Fee** - \$ (2,806.27)0 0 9,909.20 23,386.32 \$ 00 WAD Fee(Less Travel) 13,979.10 \$ 53.3% \$ 10,920.29 \$ 18,589.76 \$ 160,045999 of 2 Job To DateTotals(Less Fe \$ 306,249.00 \$ 225,579.60 \$ 53.5% \$ 163,697.41 \$ 136,503.57 \$ 296,549.56 \$

6,720.79 \$

(135,071.59)

Note: The earned value curves depicts labor costs and expenses to date. The percent complete for the WAD is a statistical calculation.